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EXAMINER

LEVITAN, DMITRY

ART UNIT PAPER NUMBER

2616

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/006,791	Applicant(s) LEHTIMAKI ET AL.	
	Examiner Dmitry Levitan	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9 and 11-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9 and 11-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Amendment, filed 03/09/06, has been entered. Claims 1-3, 5-9 and 11-27 remain pending.

Claim Objections

1. In light of Applicant's amendment, the claim objections set in the previous Office action have been withdrawn.

Claim Rejections - 35 USC § 103

1. Claims 1-3, 5-9, 11-14, 19, 21-25 and 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien (US 6,389,008).

1. Regarding claims 1-3, 11, 21-23 and 27, Lupien teaches a network, a method and gateway comprising:

A telecommunication network (integrated network on Fig. 2 and 14:46-62) having at least one radio access network (cellular network ANSI-41 on Fig. 1 and 2, 14:28-45), a core network (packet data network 34 on Fig. 2 and 14:63-15:2), comprising a gateway device (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10) and a network control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10), and at least one terminal device (inherently part of cellular network 26 on Fig. 2),

Wherein said core network comprises at least one gateway device, located within the core network (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10), and at least one network control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10, wherein EIR identifies valid mobile equipment to prevent use of lost and stolen equipment) adapted to control said at least one gateway device by transmitting a control information to the gateway device (inherently part

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of the system, because authorization of the mobile equipment is essential for the system operation),

Wherein said radio access network is directly connected to the gateway device via a first interface (interface between SGSN 32 and items shown in box 38: GPRS-VLR 37 and IW GPRS-BSC 39 shown on Fig. 2 and 15:21-30),

Wherein a second interface, located within the core network, is connected between the access network control device and the gateway device, the control information being transmitted from the access network control device and the gateway device via said second interface (Interface Gf between SGSN 32 and EIR 36 on Fig. 2); and

Wherein said telecommunication network is adapted to route user data directly, without being transmitted through the network control device, between said radio access network and said at least one gateway device via said first interface (routing data through SGSN and GGSN to the packet data network 34 as shown on Fig. 2 and 14:67-15:4), and

Wherein the conversion between audio signals carried on telephone circuits and data packets carried over the Internet or other packet networks is provided (providing conversion between audio signals of cellular network ANSI-41 and data packets to be carried over packet data network 34, as shown on Fig. 2 and 2:63-3:4).

Lupien does not teach to perform conversion between audio signals carried on telephone circuits and data packets carried over Internet at the gateway.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform conversion between audio signals carried on telephone circuits and data

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packets carried over Internet at the gateway, to reduce cost of the system by collocating the conversion unit with the gateway.

In addition regarding claims 21-23, Lupien teaches using network control device /EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein mobile equipment inherently transmits control information to EIR for authorization including user's data through the first interface, connecting the access radio network to the gateway.

In addition regarding claim 27, Lupien teaches using EIR to identify valid mobile equipment to prevent use of lost and stolen equipment, wherein the gateway is inherently receiving the control information from EIR.

2. Regarding claims 5 and 6, Lupien teaches user data as real-time speech and audio (cellular based telephones, wherein data is real-time speech/voice 2:5-10).

3. Regarding claims 12 and 13, Lupien teaches the packet network as an ATM and IP network (ATM and IP networks 1:30-50).

4. Regarding claim 7, Lupien teaches all the limitations of parent claims 1, 5 and 6. Lupien does not teach using RTP protocol.

Official notice is taken that RTP protocol is well known and used for real time speech transmission.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using RTP protocol to the system of Lupien improve the system compatibility with devices using popular RTP protocol.

5. Regarding claims 8, 9, 14, 24 and 25, Lupien teaches all the limitations of parent claims 1 and 21.

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Lupien does not teach using ISUP, MGCP or TDM protocols for second interface.

Official notice is taken that ISUP, TDM and MGCP protocols are well known and used for transmitting data in telecommunication networks.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using ISUP, TDM or MGCP protocols to the system of Lupien to improve the system compatibility with devices using popular ISUP, TDM or MGCP protocols.

6. Regarding claim 19, Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using access network control unit being part of a Mobile Switching Center.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add access network control unit to a Mobile Switching Center to reduce cost of the system by collocating access network control unit with a Mobile Switching Center.

7. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Zheng (US 5,745,477).

Lupien teaches all the limitations of parent claim 1, including packet networks as ATM and IP.

Lupien does not teach using packet networks for transmitting control information.

Zheng teaches using packet or ATM networks for transmitting control information (using RM cells to transmit control information 2:1-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using packet networks for transmitting control information of Zheng to the system of Lupien to utilize well known control delivery method to make the system compatible with numerous available ATM and IP devices.

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8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of Admitted prior art.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach telecommunication network as UMTS network.

Admitted prior art teaches telecommunication network as UMTS network (Specification, Background of the invention, 2:3-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add new UMTS telecommunication network standard of Admitted prior art to the system of Lupien to utilize new features of well known standard.

9. Claims 20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lupien in view of UMTS 23.01 V 1.0.0 (1998-09) standard.

Lupien teaches all the limitations of parent claim 1.

Lupien does not teach using Iu as the first interface.

UMTS standard teaches using Iu interface between access and core network domains (Iu interface, shown on Fig. 1 and page 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add Iu interface of UMTS telecommunication network standard to the system of Lupien to utilize new features of well known standard and make the system compatible with other UMTS devices.

Response to Arguments

10. Applicant's arguments filed 03/09/06 have been fully considered but they are not persuasive.

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On page 7 of the Response, Applicant argues that the teaching of Lupien is different from the claimed invention because claim 1 comprises the network control device and the gateway device located in the core network.

Examiner respectfully disagrees.

Lupien teaches a core network (packet data network 34 on Fig. 2 and 14:63-15:2), comprising a gateway device (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10) and a network control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10). Therefore a gateway device and a network control device of Lupien are located in the core network.

On page 7 of the Response, Applicant argues that the office action contradicts itself by identifying a core network (34 on Fig. 2) comprising a gateway (32 and 33).

Examiner respectfully disagrees.

The gateway as disclosed in the rejection of claim 1, GGSN 33 and SGSN 32 is a gateway directly connected the packet network 34, see Fig. 2, and therefore can be considered as a part of the core network as claimed by Applicant.

On pages 7 and 8 of the Response, Applicant argues that the office action contradicts itself by identifying a core network (34 on Fig. 2) comprising the EIR (36) and the EIR does not control a gateway device.

Examiner respectfully disagrees.

Lupien teaches said core network comprises at least one gateway device, located within the core network (SGSN 32 and GGSN 33 on Fig. 2 and 14:64-15:10), and at least one network

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control device (equipment identity register EIR 36 on Fig. 2 and 15:5-10, wherein EIR identifies valid mobile equipment to prevent use of lost and stolen equipment) adapted to control said at least one gateway device by transmitting a control information to the gateway device (inherently part of the system, because authorization of the mobile equipment is essential for the system operation).

Therefore the EIR is clearly a part of the core network and is in control of the gateway, because the EIR controls the access of a mobile unit to the network through the gateway, comprising SGSN and GGSN. In addition, EIR is connected to the gateway, particularly SGSN, as shown on Fig. 2.

On page 7 of the Response, Applicant argues that ANSI-41 of Lupien is not directly connected to the core network, the SGSN and GGSN and is not a radio access network.

Examiner respectfully disagrees.

Radio network of Lupien is an access network, because it provides an access for cellular phone subscribers access to the core network, comprising interface elements of 38, as shown on Fig. 2 and connected to the gateway as disclosed in the rejection above.

On page 8 of the Response, Applicant argues that GPRS-BSC of Lupien does not belong to the access network ANSI 41, because it is shown on Fig. 2 on the right side of the dotted line, identifying ANSI 41 and GPRS networks.

Examiner respectfully disagrees.

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GPRS-BSC of Lupien is a part of the interface device 38, shown as a device connected to both networks on Fig. 2, operating as a gateway between the two networks and therefore identified as a portion of the access network ANSI-41 15:11-30, connected to the gateway, comprising GGSN and SGSN, as shown on Fig. 2.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7529. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan
Examiner
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